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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,880	07/28/2003	Menahem Kroll	25602	3641

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EXAMINER

BROWN JR, NATHAN H

ART UNIT	PAPER NUMBER
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2121

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/627,880	Applicant(s) KROLL, MENAHEM	
	Examiner Nathan H. Brown, Jr.	Art Unit 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE (3) MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Examiner's Detailed Office Action

1. This Office is responsive to application 10/627880, filed July 28, 2003.
2. Claims 1-25 have been examined.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are considered to be an algorithm that does not meet the standard set forth in the State Street Bank case of being tangible, useful, and concrete. In this instance the claims are not considered to be tangible since no real world result is provided. Establishing that an event is true or false, in the abstract, is not a real world result that has practical application.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3-6, 8-13, 15-18, and 20-25 are rejected under 35 U.S.C. 102(b) as being anticipated by *Curtis et al.* (USPN 6208720 B1).

Regarding claims 1, 24, and 25. *Curtis et al.* teach a method, program storage device, and computer program product (*see* Abstract, *Examiner interprets database to be a computer storage device.*) for determining whether a situation (*see* col. 5, lines 28-30, *Examiner interprets “Domain-specific implementation” to comprise a situation description. See col. 8, III. Processing Event Records, lines 3-14, Examiner interprets “When implemented as a telecommunications fraud detection system...” to mean that the domain-specific implementation is to determine fraud situations.*) is logically true or false upon occurrence of an event (*see* col. 2, §SUMMARY OF THE INVENTION, lines 23-24, *Examiner interprets an alarm to indicate that a fraud situation is logically ‘true’ (i.e., inferred by the rule base).*), said method comprising: using conditions associated with said situation in combination with current values of parameters related to said conditions (*see* col. 5, lines 22-27, *Examiner interprets “presentation parameters and external system interacting parameters” to be parameters related to said conditions.*) to create a database of current thresholds each corresponding to respective limits which characterize the situation (*see* col. 15, lines 29-33) and at least one of which is a

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composite threshold that encapsulates multiple conditions that can be directly compared with a single respective value of a parameter associated with an event (*see col. 16, lines 13-18*); responsive to an event, comparing successive parameters associated with the event with respective ones of the current thresholds until either there are no more thresholds to be compared or until it can be definitively established that the situation is logically true or false (*see col. 18, lines 30-35*); and prior to processing a subsequent event, updating the current thresholds in said database (*see col. 19, lines 27-37*).

Regarding claim 12. *Curtis et al.* teach the method according to claim 1, wherein the boundaries of the time histories (*see col. 8, lines 40-41, Examiner interprets "network event records" as time histories.*) vary from client to client randomly or arbitrarily (*see col. 20, lines 47-50, Examiner interprets "X number of completed international calls using the same authcode/BTN overlap in time by at least N minutes within a sliding window of time T" to be call time histories wherein the boundaries vary from client to client (using the same authcode/BTN fraudulently) randomly or arbitrarily within N minutes in a sliding window of time.*).

Regarding claim 13. *Curtis et al.* teach a system (*see Abstract*) for determining whether a situation (*see above*) is logically true or false upon occurrence of an event (*see above*), said system comprising: a database of current thresholds each corresponding to respective limits which characterize the situation (*see above*) and at least one of which is a composite threshold that encapsulates multiple conditions that can be directly compared with a single respective value of a parameter associated with an event (*see above*); a synchronous processor responsive to an event for comparing successive parameters associated with the event with respective ones of the

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current thresholds until either there are no more thresholds to be compared or until it can be definitively established that the situation is logically true or false (*see Fig. 3 and col. 12, lines 18-38, Examiner interprets 310a...310n to be the synchronous processors supporting synchronous automatic system operations.*); and an asynchronous processor responsive to the event for updating the current thresholds in said database prior to processing a subsequent event (*see Fig. 3 and col. 12, lines 1-38, Examiner interprets 152a...152n to be the asynchronous processors supporting asynchronous manual operations.*).

Regarding claims 3 and 15. *Curtis et al.* teach the method according to claim 1 and system according to claim 13, wherein the successive thresholds are compared according to a predetermined hierarchy so parameters are processed in progressively decreasing orders of importance (*see, col. 19, lines 56-59, "There is no hierarchy required for applying the most specific threshold. Users could, however, implement a hierarchy if desired. One event may generate more than one OTCD alarm."*).

Regarding claims 4 and 5. *Curtis et al.* teach the method according to claim 1, wherein the event is associated with a transaction that must be authorized prior to completion and the method includes comparing at least one parameter with a corresponding boundary threshold and rejecting the transaction if the at least one parameter does not pass the corresponding boundary threshold or authorizing the transaction if the at least one, parameter passes the corresponding boundary threshold (*see col. 11 line 50 to col. 12 line 17, Examiner asserts that the live operators can*

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reject or authorize transactions manually for cases on the boundary of the fraud definition supplied in the implementation.).

Regarding claims 6 and 18. *Curtis et al.* teach the method according to claim 4 and the system according to claim 16, wherein the at least one parameter relates to a location from which a transaction is performed and the corresponding boundary threshold is a composite threshold that relates to a geographical boundary within which the transaction may be authorized (*see col. 21, lines 5-19, Examiner interprets the boundary threshold to be the composite of "...combinations of originations and terminations or... a latitude/longitude for each country or NPA and a maximum travel speed...".*).

Regarding claims 8 and 20. *Curtis et al.* teach the method according to claim 4 and system according to claim 16, wherein the at least one parameter relates to a monetary value and the corresponding boundary threshold relates to a monetary value that may be authorized (*see col. 25, lines 15-22*).

Regarding claim 9. *Curtis et al.* teach the method according to claim 1, further including updating the current thresholds based on external information (*see col. 12, lines 5-11, Examiner interprets credit card issuer or owner indications to be external information and the data the live operator enters into the system to generate alarms immediately to be threshold data.*).

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Regarding claims 10 and 22. *Curtis et al.* teach the method according to claim 7 and the system according to claim 19, wherein at least one of said thresholds relates to a geographical location from which a subsequent event may be validly initiated (see col. 23, lines 5-11, *Examiner interprets a geographical profile to consist of at least one threshold that relates to a geographical location and a geographical profile representing a 'normal pattern' to consist of at least one threshold that relates to a geographical location from which a subsequent event may be validly initiated.*).

Regarding claim 11. *Curtis et al.* teach the method according to claim 7, including generating one or more time-histories each relating to events originating at a specific time range prior to subsequent event and using said time-histories to update the threshold for the subsequent event (see Fig. 4, Steps 434 and 436, *Examiner interprets a call history database to consist of one or more time-histories each relating to events (telephone calls) originating at a specific time range prior to subsequent event (e.g., a later telephone call from the same number).*).

Regarding claims 16 and 17. *Curtis et al.* teach the system according to claim 13, wherein the event is associated with a transaction that must be authorized prior to completion and the synchronous processor is adapted to compare at least one parameter with a corresponding boundary threshold and to reject the transaction if the at least one parameter does not pass the corresponding boundary threshold or to authorize the transaction if the at least one parameter passes the corresponding boundary threshold (see col. 11 line 50 to col. 12 line 17, *Examiner asserts that the live operators can reject or authorize transactions manually for cases on the*

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boundary of the fraud definition supplied in the implementation and then update the server database on one of the synchronous processors to compare at least one parameter with a corresponding boundary threshold for normal or fraudulent patterns.).

Regarding claim 23. *Curtis et al.* teach the system according to claim 19, wherein the asynchronous processor is adapted to generate one or more time-histories each relating to events originating from a common time origin and using said time-histories to update the thresholds (see col. 11, lines 60-67 and col. 12, lines 1-3, *Examiner interprets "two simultaneous credit card calls and ... ten calls within one hour" to be one or more time-histories. Examiner further asserts that for the live operator to "...input data into the system so that...threshold rules or profiles are altered..." the asynchronous processor of their workstation must be used.*).

Regarding claim 21. *Curtis et al.* teach the system according to claim 13, wherein the asynchronous processor is adapted to update the current thresholds based on external information (see col. 12, lines 5-11, *Examiner interprets credit card issuer or owner indications to be external information and the data the live operator enters into the system to generate alarms immediately to be threshold data. Examiner further asserts that the data the live operator enters into the system is first entered via an asynchronous processor associated with their workstation.*).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Curtis et al.* in view of *Monson-Haefel*, “Enterprise JavaBeans”, 2000.

Regarding claims 2 and 14. *Curtis et al.* teach the method according to claim 1 and the system according to claim 13. *Curtis et al.* do not teach the method or system, further including blocking response to, or rejecting, subsequent events pending completion of updating the current thresholds in the database. *Monson-Haefel* does teach blocking response to, or rejecting, subsequent events pending completion of updating the current thresholds in the database (*see* §8.3. Isolation and Database Locking, para. 8.3.2. Database Locks, “An exclusive write lock prevents other transactions from reading or changing data until the current transaction is complete. An exclusive write lock prevents dirty reads by other transactions.”, *Examiner interprets an exclusive write lock to be a block.*). It would have been obvious at the time the invention was made to persons having ordinary skill in the art to combine *Curtis et al.* with *Monson-Haefel* to prevent dirty reads by other transactions.

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9. Claims 7 and 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Curtis et al.* in view of *Yoshioka et al.* (USPN 6425039 B2).

Regarding claims 7 and 19. *Curtis et al.* teach the method according to claim 1 and the system according to claim 13. *Curtis et al.* do not teach the asynchronous processor adapted to compute at least one of said thresholds in response to a trigger generated by a real-time clock in response to said event, the real time clock being set or otherwise modified in response to said events.

Yoshioka et al. do teach the asynchronous processor (*see col. 2, lines 43-47 and Fig. 1, Examiner interprets the "data processor" (subsequently referred to as "the single-chip data processor") to be an asynchronous processor.*) adapted to compute at least one of said thresholds in response to a trigger generated by a real-time clock (*see col. 7, lines 50-55, Examiner asserts the real-time clock "continues the timekeeping operation even when the supply of operation clocks to the central processing unit CPU is interrupted" and thus generates all triggers in the state where the CPU's clocks are interrupted.*) in response to said event (*see col. 3, lines 54-57, Examiner interprets "exception event" to be said event and "internal conditions of a status*

register" to be said thresholds.), the real time clock being set or otherwise modified in response to said events (*see col. 7, lines 64-66, Examiner interprets "executes the start of bus cycles for the above-mentioned peripheral modules" to mean setting the RTC.*). It would have been obvious at the time the invention was made to persons having ordinary skill in the art to combine *Curtis et al.* with *Yoshioka et al.* to shorten the time required for the transition from a moment of occurrence of an exception event during normal processing to the operation of an exception handler for coping with the exception event.

Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan H. Brown, Jr. whose telephone number is 571-272- 8632. The examiner can normally be reached on M-F 0830-1700. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 571-272-3687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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